

# Lakes and Wetlands and the Economy of Vilas County



# Outline

- The aquatic habitats of Vilas County
- The economic value of those aquatic habitats
- How the Vilas County Land & Water Conservation fits in to the picture



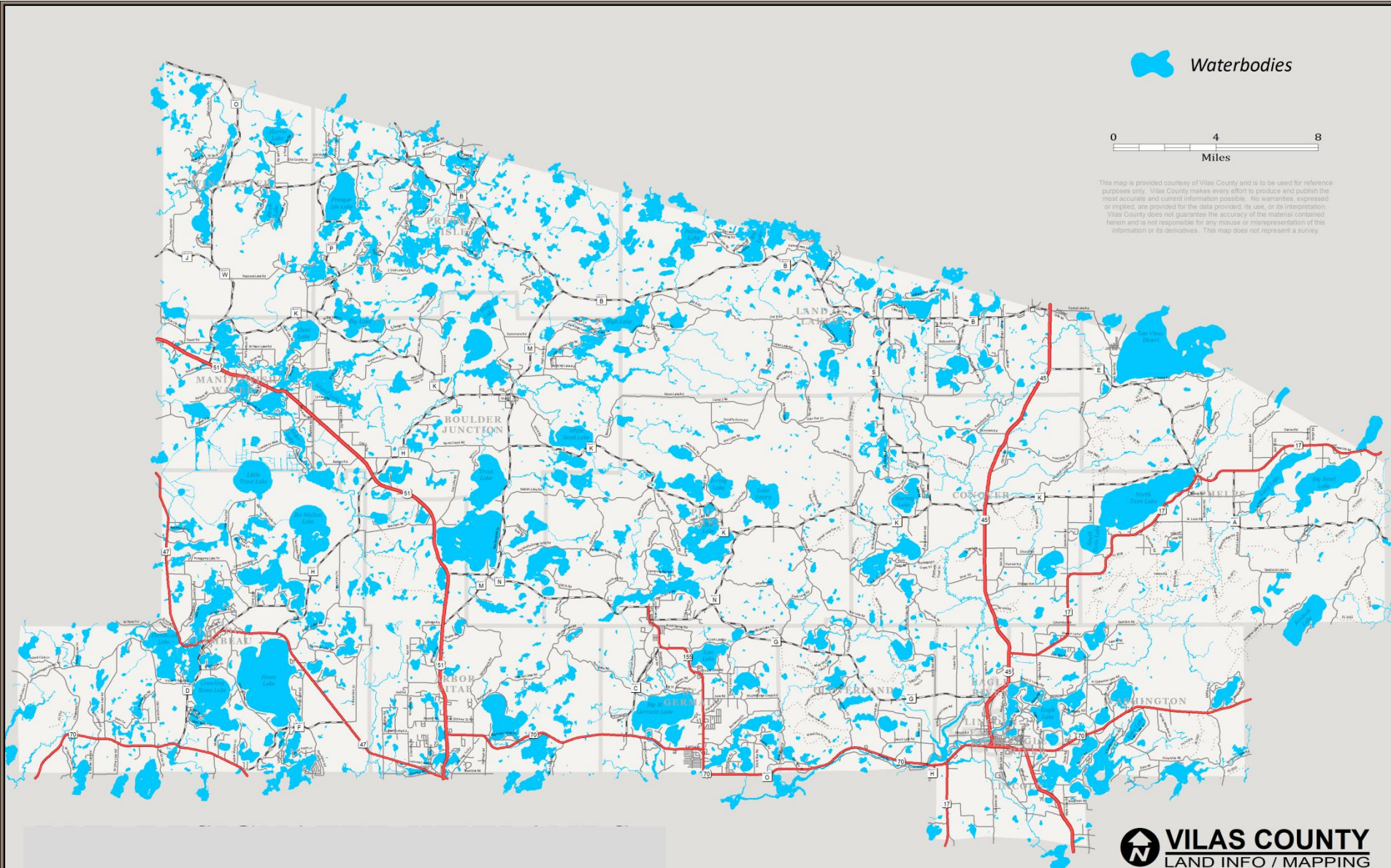
# Water Facts – Vilas County

## Lakes and Streams

- 1320+ Lakes
- Headwaters of 4 Big Rivers including the Wisconsin and Chippewa Rivers
- Surface waters (lakes & streams) = 102,276 acres, or **15.6%** of land area
- The Northern Highlands Ecological Landscape has one of the highest concentrations of naturally formed lakes **IN THE WORLD**



# The surface waters of Vilas County





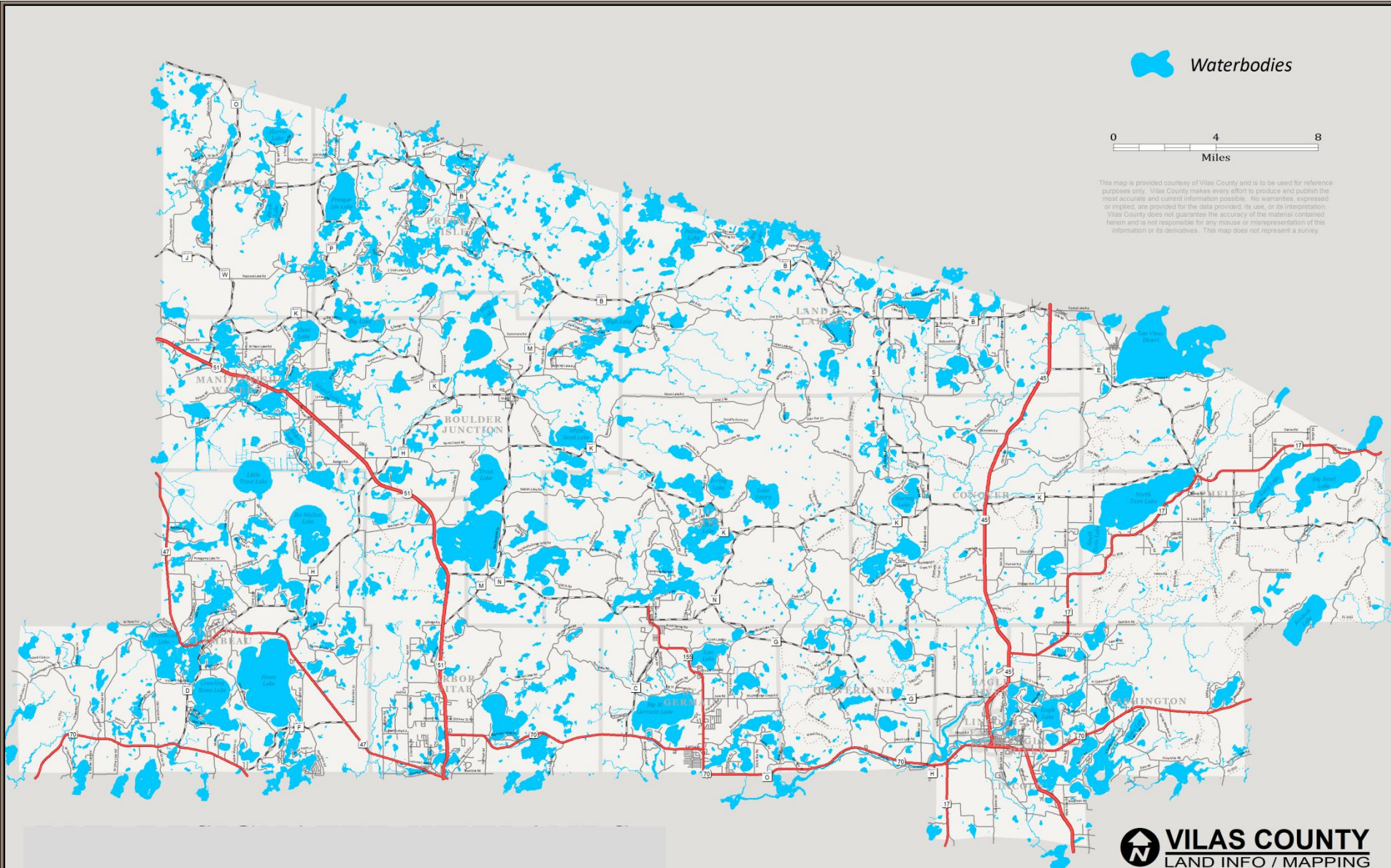
# Water Facts – Vilas County Wetlands

- Wetlands (> 2 acres) = 121,258 acres, or 18.5% of land area
- Wetlands (< 2 acres) = ? acres, but very important!



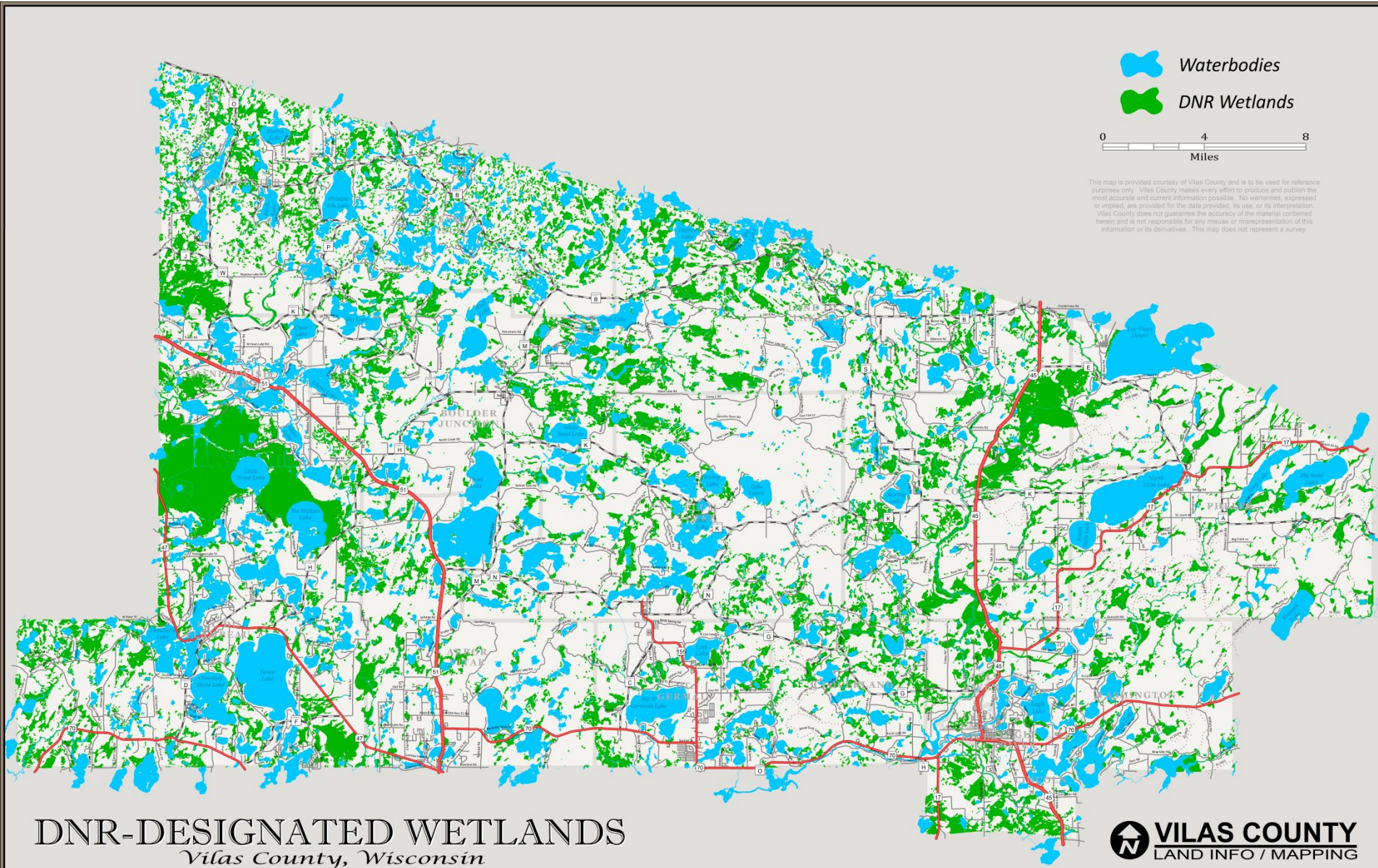


# The surface waters of Vilas County





# The surface waters + wetlands of Vilas County





# Water Facts – Vilas County

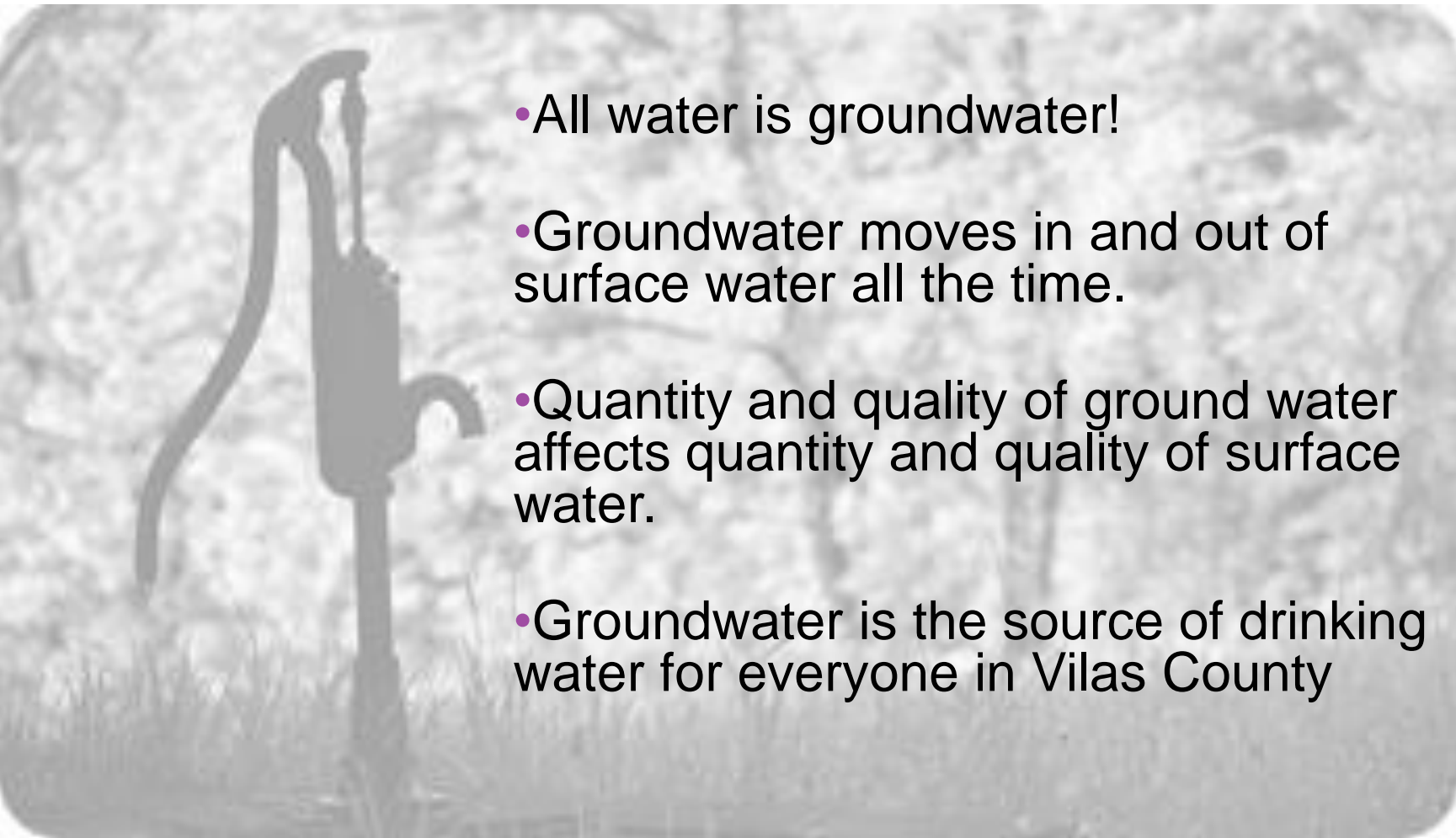
15.6% (surface waters) + 18.5% (mapped wetlands)

= 34% of  
Vilas County  
is WET



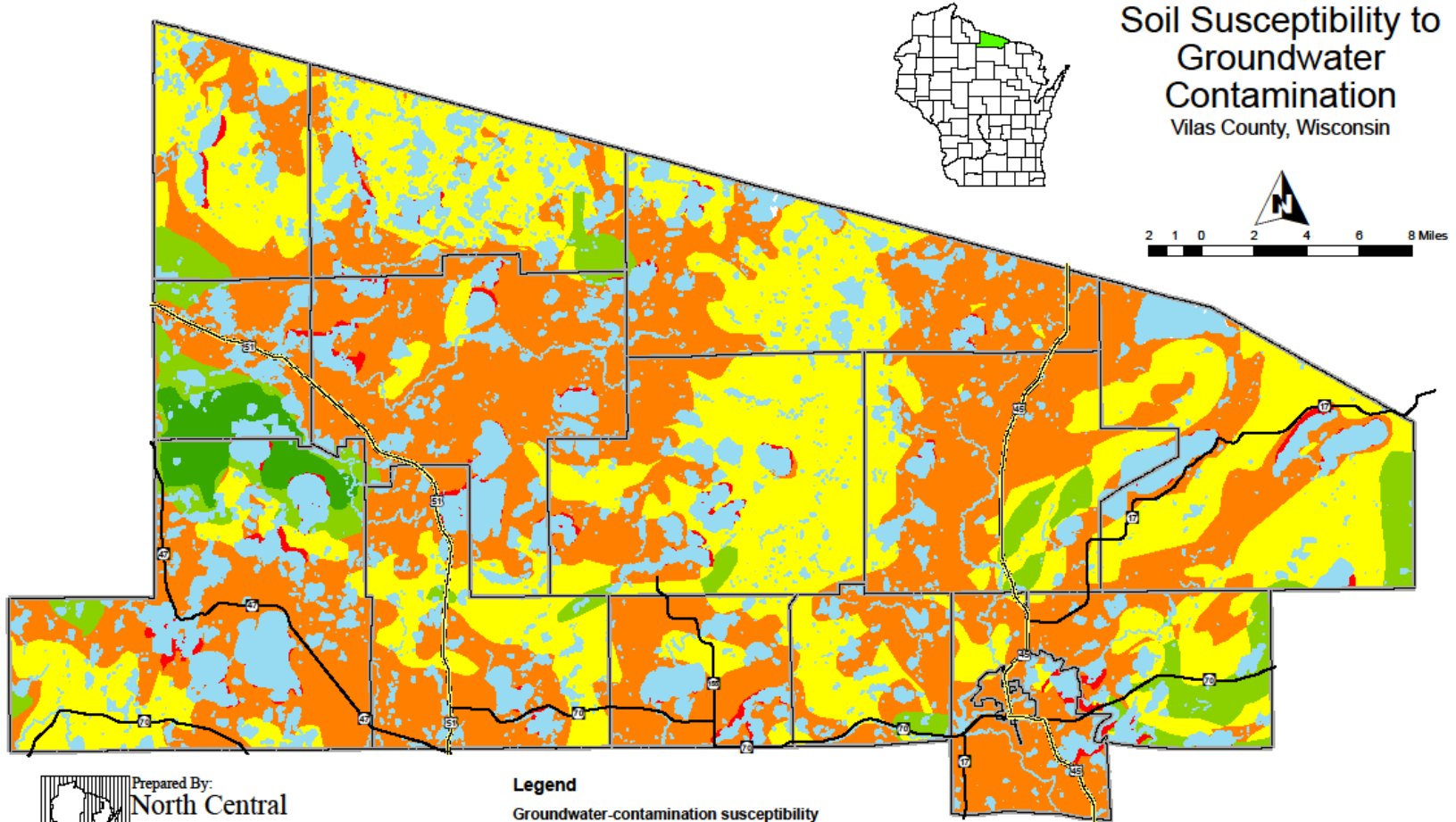


# Water Facts – Vilas County Groundwater

- 
- All water is groundwater!
  - Groundwater moves in and out of surface water all the time.
  - Quantity and quality of ground water affects quantity and quality of surface water.
  - Groundwater is the source of drinking water for everyone in Vilas County

# Susceptibility to Contamination

Map 6  
Soil Susceptibility to  
Groundwater  
Contamination  
Vilas County, Wisconsin

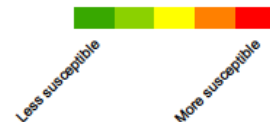


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## Legend

Groundwater-contamination susceptibility

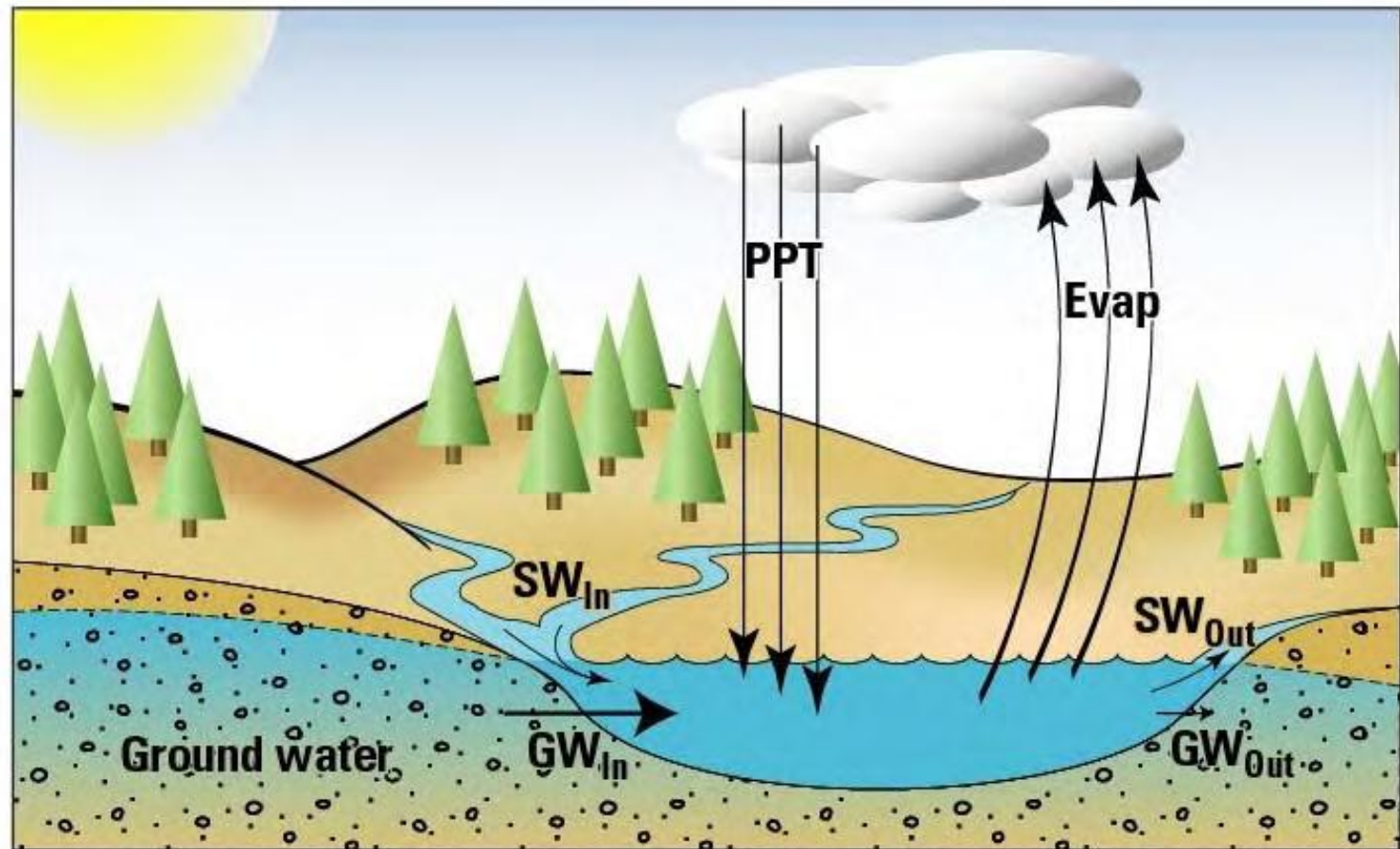


Source: WI DNR, NCWRPC, Vilas Co

This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.

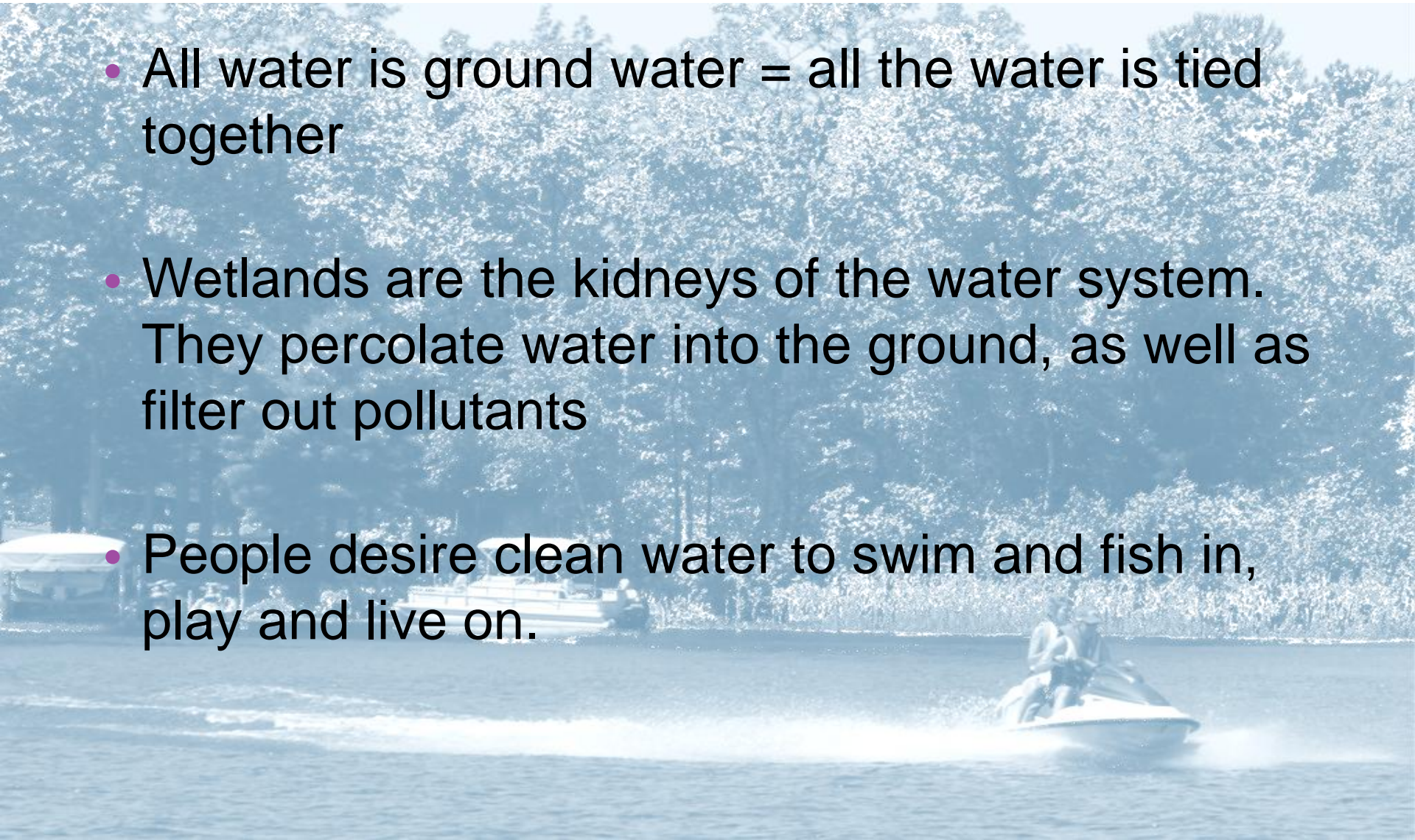


# Rain & Snow are the source of water in Vilas County



# How it ties together

- All water is ground water = all the water is tied together
- Wetlands are the kidneys of the water system. They percolate water into the ground, as well as filter out pollutants
- People desire clean water to swim and fish in, play and live on.



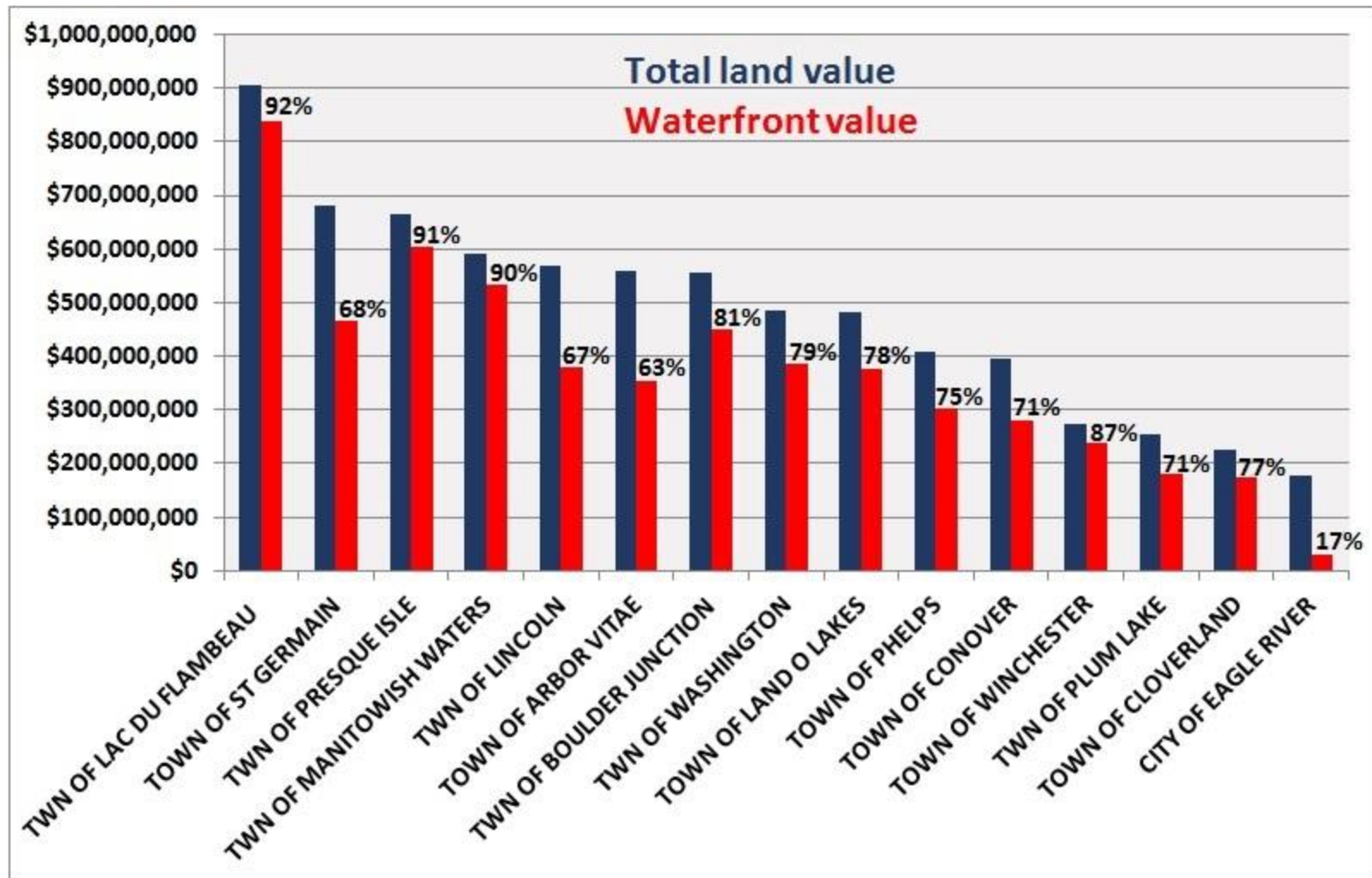


# Sources of Economic Value

- Property Values
- Tourism Spending
- Recreation/Use Values



## Assessed Value of waterfront property in Vilas County as a percent of each town total in 2013.





# Assessed Value of waterfront property in Vilas County as a percent of all properties in 2013

	On Water Value	Total Value	%
VILAS COUNTY WHOLE	\$5,595,742,600	\$7,228,815,700	77.41%



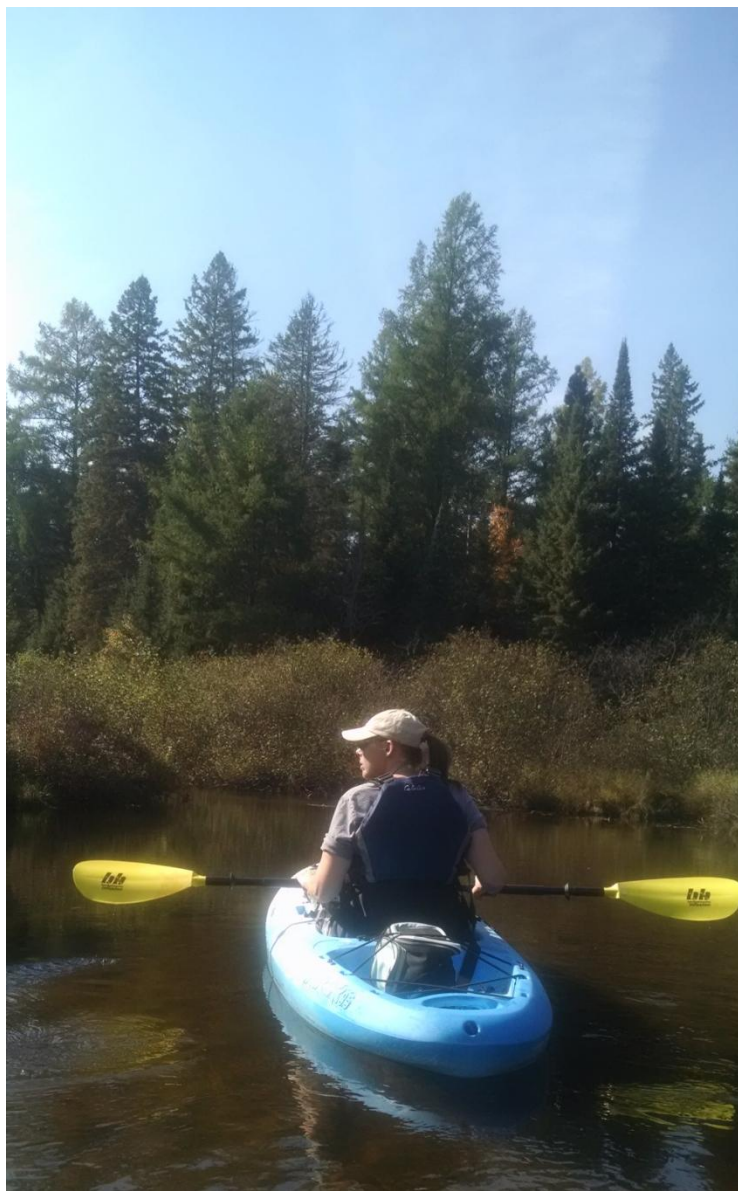
# Visitor spending based on population

County	2013 (Millions)	Population	Per capita direct spending
Sauk County	\$888.5	58,261	\$15,250.34
Door County	\$299.0	28,200	\$10,602.84
Vilas County	\$203.1	22,379	\$9,075.47
Adams County	185.7	20,875	\$8,895.81
Oneida County	\$197.0	36,779	\$5,356.32
Walworth County	\$477.8	101,007	\$4,730.37



# Visitor Spending Regionally

County	2013 (Millions)	Population	Per capita direct spending
Forest County	\$11.8	9,304	\$1,268.27
Iron County	\$18.9	5,916	\$3,194.73
Oneida County	\$197.0	36,779	\$5,356.32
Vilas County	\$203.1	22,379	\$9,075.47



## Visitor Spending – Vilas County

**Vilas County – has the 3<sup>rd</sup> highest tourism intensity in Wisconsin. (Jobs based on tourism - 2011).**

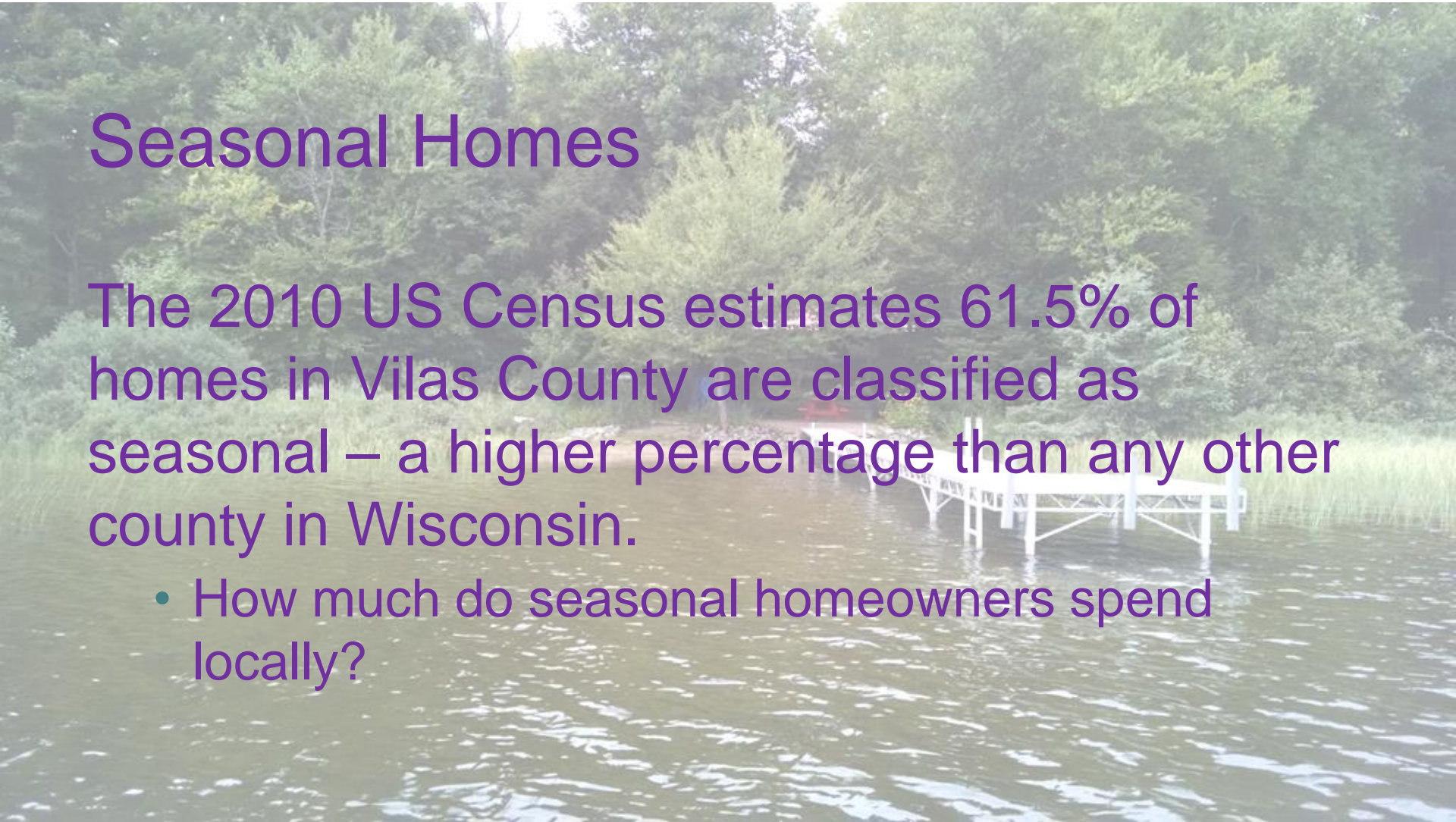


# Water Facts – Vilas County

## Seasonal Homes

The 2010 US Census estimates 61.5% of homes in Vilas County are classified as seasonal – a higher percentage than any other county in Wisconsin.

- How much do seasonal homeowners spend locally?



# Estimated Spending by Northwoods Seasonal Home Owners

Source: University of Wisconsin-Whitewater,  
Economic Impact Study, "Broadband and  
Vacation Properties", Wisconsin" August 2014

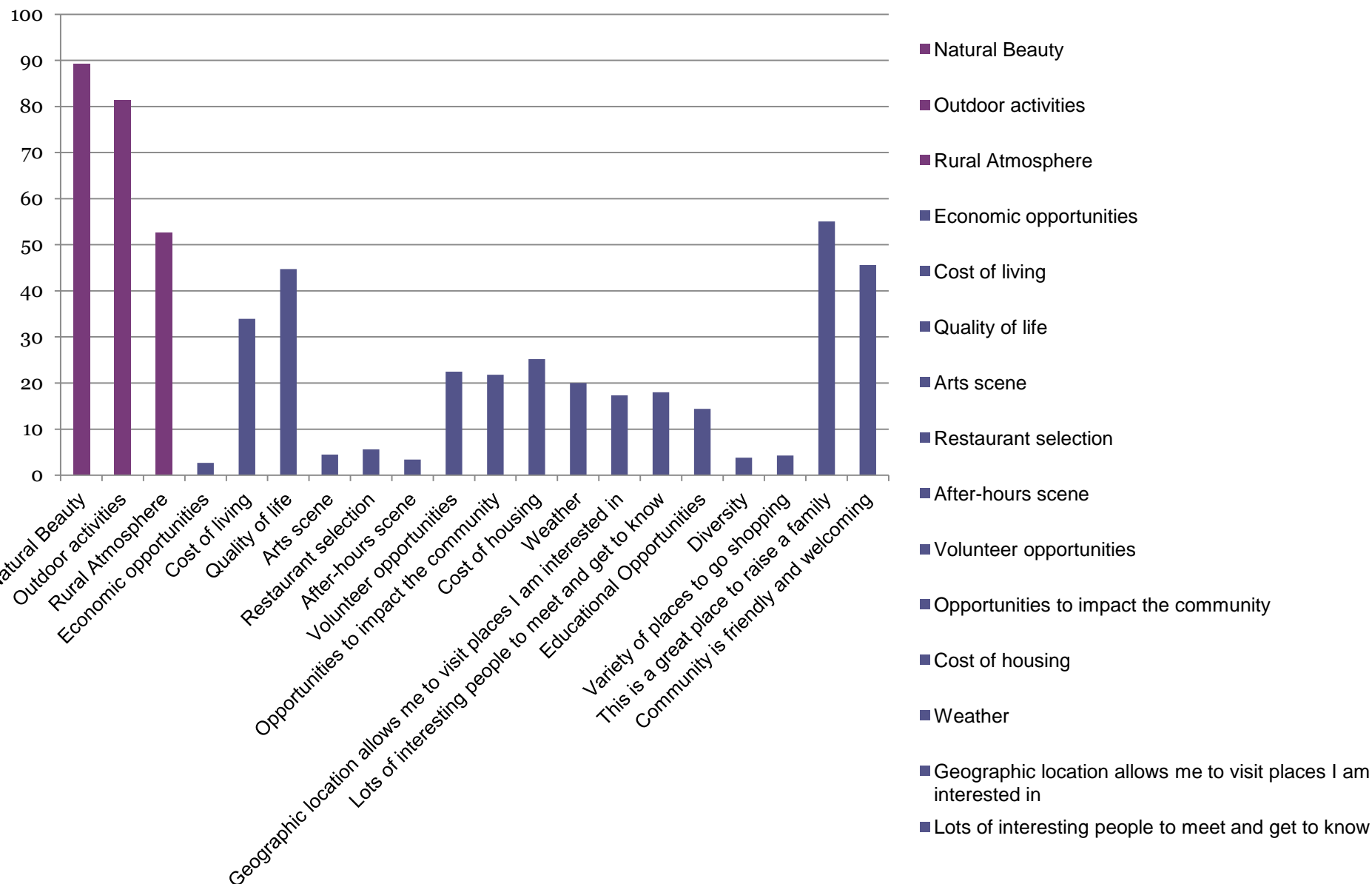
Category	Daily Expenses
Construction	\$12.48
Fishing/Boating	\$4.57
Medical Care	\$4.24
Dining	\$8.33
Groceries/Liquor	\$13.25
Gas	\$6.15
Shopping	\$5.20
License	\$1.02
Other (Cleaning, Maintenance, Communication)	\$16.06
Total	\$74.18



# Estimated Spending by Northwoods Seasonal Home Owners

- 15,458 Seasonal Homes in Vilas (2010 Census) that spend an estimated \$74.18 per day when occupied.
- $15,458 \times \$74.18 = \text{\textcolor{red}{\$1,146,674 per day}}$
- If Seasonal Home Owners spend 60 days a year here;  $\text{\$1,146,674} \times 60 = \text{\textcolor{red}{\$68,800,440 to Vilas County Economy}}$

# Permanent Residents





# Conclusion...

- The water is a primary reason that:
  - Tourists visit here
  - Families purchase second homes here
  - Locals stay here
  - People retire here
  - Businesses locate here

**Healthy Lakes = a Healthy Economy!**

# Healthy Lakes are Critical to the Northwoods Economy

- Lakefront property owners and lake users contribute **significantly** to the local economy.
- The **economy** of the Northwoods is dependent on people wanting to live and recreate in the most lake rich area in the United States!
- If lake and stream water quality deteriorates, waterfront property values will also erode, resulting in the tax base shifting to off water properties.



# Threats to Vilas County Waters



In the past 150 years, human activities have increasingly strained the ability of Vilas County lakes and streams to recover from stressors and resulted in diminished water quality:

- The original forest cutover
- Wide-scale slash burning
- Dam building and unnatural water flows
- Development/alteration of shorelines
- Road building
- Invasive Species



# Vilas County Services Available

## Aquatic Habitat Issues

- Water Quality
- Aquatic Invasive Species
- Lake Management
- Lake Associations and Districts (>100)

## Role of Vilas County Land & Water

- Water Quality improvement and protection
- AIS education, monitoring and management
- Lake management development and funding
- Lake Association formation and effective action



# Land & Water Resource Management Plan Goals: 2015-2019

- **Goal 1: Increase the publics' level of natural resource knowledge and stewardship**
  - *(Resource Concerns – Information & Education for all county natural resources & programs)*
- **Goal 2: Protect aquatic and terrestrial environments from non-point source pollutants**
  - *(Resource Concerns – Point/Non-point Source Pollution, Soil Erosion, Nutrient Loading, and Shoreline Development)*
- **Goal 3: Protect aquatic, terrestrial, and wetland ecosystems from invasive species**
  - *(Resource Concern – Aquatic and Terrestrial Invasive Species)*
- **Goal 4: Organize sites of concern within watersheds, wetlands, lakes, and forests**
  - *(Resource Concern – Geographic Prioritization Project)*

# LWCC and LWCD: Protecting the water resources in Vilas County



## Assessed Value of waterfront property in Vilas County as a percent of each township total in 2013.

Township	On Water Value	Total Value	%
TWN OF LAC DU FLAMBEAU	\$837,404,400	\$906,211,600	92.41%
TWN OF PRESQUE ISLE	\$604,272,300	\$664,408,100	90.95%
TWN OF MANITOWISH WATERS	\$533,003,400	\$592,339,300	89.98%
TOWN OF WINCHESTER	\$237,039,000	\$272,004,600	87.15%
TWN OF BOULDER JUNCTION	\$451,411,200	\$555,879,000	81.21%
TWN OF WASHINGTON	\$385,044,800	\$484,828,100	79.42%
TOWN OF LAND O LAKES	\$376,102,300	\$481,601,300	78.09%
TOWN OF CLOVERLAND	\$174,259,600	\$226,315,700	77.00%
TOWN OF PHELPS	\$304,036,400	\$407,069,500	74.69%
TOWN OF CONOVER	\$281,411,500	\$394,814,400	71.28%
TWN OF PLUM LAKE	\$182,213,700	\$255,916,900	71.20%
TOWN OF ST GERMAIN	\$464,398,200	\$682,293,100	68.06%
TWN OF LINCOLN	\$380,571,500	\$568,367,300	66.96%
TOWN OF ARBOR VITAE	\$354,810,300	\$559,314,500	63.44%
CITY OF EAGLE RIVER	\$29,764,000	\$177,452,300	16.77%